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09/976,205	10/12/2001	Brian Michael Lawton	56145473-19	1411

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NEW YORK, NY 10036

EXAMINER
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WEIS, SAMUEL

ART UNIT	PAPER NUMBER
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3691

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/21/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

09/976,205

Applicant(s)

LAWTON ET AL.

Examiner

Samuel S. Weis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9, 12-34 is/are rejected.
- 7) ☒ Claim(s) 10 and 11 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date October 12, 2001.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. This is in response to the application filed October 12, 2001. Claims 1-34 have been examined.

#### ***Allowable Subject Matter***

1. Claims 10-11 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

#### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 8, 10, 11, 22, and 30 are rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicant(s) regard as their invention.
4. Claims 8, 22, and 30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The limitation includes the acronym CHAID. The claims do not provide any explanation of the meaning of the acronym CHAID. For purposes of applying prior art, the Examiner will interpret the acronym CHAID to represent Chi-squared Automatic Interaction Detector.
5. Claims 10 and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which

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applicant regards as the invention. The limitation includes the acronym BAU. The claims do not provide any explanation of the meaning of the acronym BAU. For purposes of applying prior art, the Examiner will interpret the acronym BAU to represent Business As Usual.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-9 and 12-34 are rejected under 35 U.S.C. 102(e) as being anticipated by Lambiotte et al., U.S. Pub. No. 2002/0128960 (hereinafter, Lambiotte).

As to claim 1, Lambiotte discloses a system and method for determining whether to contact a party associated with an account, comprising:

receiving data of a first skip account (i.e. platform may receive purchased account debt or customer lists from a financial institute over network) (p. 2, ¶0019);

applying the data of the first skip account to a predictive model, the predictive model being associated with an account tracing entity and operable to generate an output indicative of an expected recovery amount from the first skip account (i.e. Platform may analyze each customer's credit history information ... and may determine a potential value for each customer's account) (p.2, ¶0020); and

determining a course of action based on the output from application of the predictive model (i.e. Platform may compare the potential value and predicted cost to determine a potential profitability level, including a determination of whether and how often to contact each customer for debt collection) (p. 2, ¶0021).

As to claim 2, Lambiotte discloses the method according to claim 1, wherein the predictive model includes a probability model that generates an output indicative of the likelihood of locating the first skip account from the account tracing entity (i.e. computing platform separately analyzes the historical account information of the accounts without demographic information using the multivariate logistic regression model to generate the back-up cost formula for calculating the likelihood of contacting the customer) (p.3, ¶44).

As to claim 3, Lambiotte discloses the method according to claim 2, wherein the output of the probability model is reduced according to a number of other account tracing entities which previously failed to locate the first skip account (i.e. computing platform may generate a variable corresponding to whether demographic vendor 170 could find the name and address of the customer) (p.3, ¶45).

As to claim 4, Lambiotte discloses the method according to claim 3, wherein the reduced output equals the output of the probability model times a degradation factor (i.e. The variables are weighted, using the historical demographic and account data, to minimize error in calculating the probability of contacting a particular customer) (p.4, ¶45).

As to claim 5, Lambiotte discloses the method according to claim 2, wherein the predictive model further includes:

a first liquidation model that generates an output indicative of an expected recovery amount from the first skip account if the account tracing entity correctly locates the first skip account (i.e. The first formula weights each identified variable to minimize the error in predicting whether a customer will pay) (p. 3, ¶0030); and

a second liquidation model that generates an output indicative of an expected recovery amount from the first skip account if the account tracing entity fails to locate the first skip account (i.e. Computing platform then generates a second formula for determining an amount a customer will likely pay) (p. 4; ¶0033).

As to claim 6, Lambiotte discloses the method according to claim 2, wherein the predictive model further includes:

a third liquidation model that generates an output indicative of an expected recovery amount from the first skip account if no action is taken to locate the first skip account through the account tracing entity (i.e. The multivariate logistic regression model analyzes the historical account data to identify the combination of financial statistics, or variables, that best predicts the probability that a particular customer will make a payment) (p.3, ¶0029).

As to claim 7, Lambiotte discloses the method according to claim 2, wherein the probability model is derived by performing a regression analysis on past data of a plurality of skip accounts and the success or failure of locating the plurality of skip accounts by the account tracing entity (i.e. The multivariate logistic regression model

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analyzes the historical account data to identify the combination of financial statistics, or variables, that best predicts the probability that a particular customer will make a payment) (p.3, ¶0029).

As to claim 8, Lambiotte discloses the method according to claim 5, wherein the first and second liquidation models are CHAID models that are derived from an analysis of past data of a plurality of skip accounts and the success or failure of locating the plurality of skip accounts by the account tracing entity (i.e. the multivariate logistic regression model may, by using regression techniques well known in the art, weigh the most predictive of the identified variables more heavily than the least predictive of the identified variables) (p.3, ¶0030).

As to claim 9, Lambiotte discloses the method according to claim 1, wherein the predictive model includes:

a probability model that generates an output indicative of the likelihood of locating the first skip account from the account tracing entity (i.e. computing platform separately analyzes the historical account information of the accounts without demographic information using the multivariate logistic regression model to generate the back-up cost formula for calculating the likelihood of contacting the customer) (p.3, ¶44);

a first liquidation model that generates an output indicative of an expected recovery amount from the first skip account if the account tracing entity correctly locates the first skip account (i.e. The first formula weights each identified variable to minimize the error in predicting whether a customer will pay) (p. 3, ¶0030);

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a second liquidation model that generates an output indicative of an expected recovery amount from the first skip account if the account tracing entity fails to locate the first skip account (i.e. Computing platform then generates a second formula for determining an amount a customer will likely pay) (p. 4, ¶0033); and

a third liquidation model that generates an output indicative of an expected recovery amount from the first skip account if no action is taken to locate the first skip account through the account tracing entity(i.e. The multivariate logistic regression model analyzes the historical account data to identify the combination of financial statistics, or variables, that best predicts the probability that a particular customer will make a payment) (p.3, ¶0029).

As to claim 12, Lambiotte discloses the method according to claim 1, wherein the step of determining a course of action includes determining that the first skip account is to be sent to a collection agency if the output of the predictive model indicates that the expected recovery amount from the first skip account is negative (i.e. after determining the estimated value of the account and the expected cost of contacting the customer, computing platform determines whether to contact the customer) (p.6, ¶0050).

As to claim 13, Lambiotte discloses the method according to claim 1, wherein: the predictive model is derived from an analysis of past data of a plurality of skip accounts (i.e. The first formula may be created from historical account data using a multivariate logistic regression model, which is well known in the art. The historical account data includes information from financial clearinghouse 160 and information regarding accounts for all customers) (p.3, ¶0028); and



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the past data includes data related to one or more of the following variables: location, payment history, balance, FICO score and credit limit (i.e. Platform 120 may analyze each customer's credit history information accessed through a commercially available source (such as the FICO model from Fair, Isaac and Company, Inc.) and/or through a financial clearinghouse 160)) (p.2, ¶0020)

such as a major credit bureau like TRW/Experian, Equifax, or TransUnion.

As to claim 14, Lambiotte discloses a method for optimizing collection of money from skip accounts, comprising:

obtaining past data related to a plurality of skip accounts and to the success or failure of locating the plurality of skip accounts by a plurality of account tracing entities (i.e. The historical account data includes information from financial clearinghouse and information regarding accounts for all customers) (p.3, ¶028);

processing the past data to derive a predictive model for each of the plurality of account tracing entities (i.e. The multivariate logistic regression model analyzes the historical account data to identify the combination of financial statistics, or variables, that best predicts the probability that a particular customer will make a payment) (p.3, ¶0029);

receiving data of a first skip account (i.e. Platform may analyze each customer's credit history information) (p.2, ¶020);

applying the data of the first skip account to the predictive models to generate a plurality of outputs, each output being associated with a corresponding account tracing entity and being indicative of an expected recovery amount by using a corresponding account tracing entity to locate the first skip account (i.e. Computing platform also enters the

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required variables from a customer's credit history and financial information into the second formula to obtain an amount the customer will likely pay if he makes a payment) (p.5, ¶0041); and

determining a course of action based on the generated outputs of the predictive models (i.e. after determining the value of the account, computing platform 120 determines an estimated cost of contacting the account holder) (p.5, ¶0042).

As to claim 15, Lambiotte discloses the method according to claim 14, wherein the step of determining a course of action includes sending the first skip account to the account tracing entity whose corresponding predictive model output is the highest and positive (i.e. The multivariable logistic regression model identifies which of these variables best predicts whether a customer will be successfully contacted and weights the identified variables in a formula for determining this probability) (p.5, ¶0045).

As to claim 16, Lambiotte discloses the method according to claim 15, further comprising:  
repeating the steps of receiving the data, applying the data and determining a course of action if the account tracing entity whose corresponding predictive model output is the highest and positive fails to locate the first skip account (i.e. computing platform separately analyzes the historical account information of the accounts without demographic information using the multivariate logistic regression model to generate the back-up cost formula for calculating the likelihood of contacting the customer) (p.5, ¶044)

As to claim 17, Lambiotte discloses the method according to claim 14, wherein the step of determining a course of action includes sending the first skip account to a collection agency if each of the outputs is negative (i.e. after determining the estimated value of the account and the expected cost of contacting the customer, computing platform determines whether to contact the customer) (p.6, ¶0050).

As to claim 18, Lambiotte discloses the method according to claim 14, wherein the predictive model for each account tracing entity includes a probability model that generates an output indicative of the likelihood of locating the first skip account from the each account tracing entity (i.e. The multivariable logistic regression model identifies which of these variables best predicts whether a customer will be successfully contacted and weights the identified variables in a formula for determining this probability) (p.5, 0045)

As to claim 19, Lambiotte discloses the method according to claim 14, wherein the predictive model for each account tracing entity further includes:  
a first liquidation model that generates an output indicative of an expected recovery amount from the first skip account if the each account tracing entity correctly locates the first skip account (i.e. The first formula weights each identified variable to minimize the error in predicting whether a customer will pay) (p. 3, ¶0030); and  
a second liquidation model that generates an output indicative of an expected recovery amount from the first skip account if the each account tracing entity fails to locate the first skip account (i.e. Computing platform then generates a second formula for determining an amount a customer will likely pay) (p. 4, ¶0033).

As to claim 20, Lambiotte discloses the method according to claim 14, wherein the predictive model further includes:

a third liquidation model that generates an output indicative of an expected recovery amount from the first skip account if no action is taken to locate the first skip account through the each account tracing entity (i.e. The multivariate logistic regression model analyzes the historical account data to identify the combination of financial statistics, or variables, that best predicts the probability that a particular customer will make a payment) (p.3, ¶0029).

As to claim 21, Lambiotte discloses the method according to claim 15, wherein the predictive model is derived by performing a regression analysis on the past data (i.e. The multivariate logistic regression model analyzes the historical account data to identify the combination of financial statistics, or variables, that best predicts the probability that a particular customer will make a payment) (p.3, ¶0029).

As to claim 22, Lambiotte discloses the method according to claim 19, wherein the first and second liquidation models are CHAID models that are derived from an analysis of the past data (i.e. the multivariate logistic regression model may, by using regression techniques well known in the art, weigh the most predictive of the identified variables more heavily than the least predictive of the identified variables) (p.3, ¶0030).

As to claim 23, Lambiotte discloses the method according to claim 20, wherein the third liquidation model is a CHAID model that is derived from an analysis of the past data (i.e. the multivariate logistic regression model may, by using regression techniques

well known in the art, weigh the most predictive of the identified variables more heavily than the least predictive of the identified variables) (p.3, ¶0030).

As to claim 24, Lambiotte discloses the method according to claim 14, wherein the predictive model for each skip tracing entity includes:

a probability model that generates an output indicative of the likelihood of locating the first skip account from the each account tracing entity (i.e. computing platform separately analyzes the historical account information of the accounts without demographic information using the multivariate logistic regression model to generate the back-up cost formula for calculating the likelihood of contacting the customer) (p.3, ¶44);

a first liquidation model that generates an output indicative of an expected recovery amount from the first skip account if the each account tracing entity correctly locates the first skip account (i.e. The first formula weights each identified variable to minimize the error in predicting whether a customer will pay) (p. 3, ¶0030);

a second liquidation model that generates an output indicative of an expected recovery amount from the first skip account if the each account tracing entity fails to locate the first skip account (i.e. Computing platform then generates a second formula for determining an amount a customer will likely pay) (p. 4, ¶0033); and

a third liquidation model that generates an output indicative of an expected recovery amount from the first skip account if no action is taken to locate the first skip account through the each account tracing entity (i.e. The multivariate logistic regression model analyzes the historical account data to identify the combination of financial statistics, or

variables, that best predicts the probability that a particular customer will make a payment) (p.3, ¶0029).

As to claim 25, Lambiotte discloses A system for optimizing collection of money from skip accounts, comprising:

a processor operable to execute programs (i.e. co-processor) (p.2, ¶0021);

memory coupled to the processor (i.e. memory) (p.2, ¶0021);;

a predictive model stored in the memory and associated with an account tracing entity, the predictive model being operable to process data of a first skip account to generate an output indicative of an expected recovery amount from the first skip account (i.e.

Computing platform communicates and transfers customer and credit data to and from input module. Platform may consider information ... when determining the potential account value); (p.2, ¶0022 and 0020) and

an analysis program stored in the memory and executable by the processor, the analysis program being operable to determine a course of action based on the output of the predictive model (i.e. the output from computing platform may include a potential value of each customer's account, a prediction of the cost of contacting each customer, and/or a potential profitability level including a determination of whether and how often to contact each customer) (p.3, ¶025)

As to claim 26, Lambiotte discloses the system according to claim 25, wherein the predictive model includes a probability model that generates an output indicative of the likelihood of locating the first skip account from the account tracing entity (i.e. computing platform separately analyzes the historical account information of the

accounts without demographic information using the multivariate logistic regression model to generate the back-up cost formula for calculating the likelihood of contacting the customer) (p.3, ¶44).

As to claim 27, Lambiotte discloses the system according to claim 26, wherein the predictive model further includes:

a first liquidation model that generates an output indicative of an expected recovery amount from the first skip account if the each account tracing entity correctly locates the first skip account (i.e. The first formula weights each identified variable to minimize the error in predicting whether a customer will pay) (p. 3, ¶0030);

a second liquidation model that generates an output indicative of an expected recovery amount from the first skip account if the each account tracing entity fails to locate the first skip account (i.e. Computing platform then generates a second formula for determining an amount a customer will likely pay) (p. 4, ¶0033).

As to claim 28, Lambiotte discloses the system according to claim 26, wherein the predictive model further includes:

a third liquidation model that generates an output indicative of an expected recovery amount from the first skip account if no action is taken to locate the first skip account through the account tracing entity (i.e. The multivariate logistic regression model analyzes the historical account data to identify the combination of financial statistics, or variables, that best predicts the probability that a particular customer will make a payment) (p.3, ¶0029).

As to claim 29, Lambiotte discloses the system according to claim 26, wherein the probability model is derived by performing a regression analysis on past data of a plurality of skip accounts and the success or failure of locating the plurality of skip accounts by the account tracing entity (i.e. The multivariate logistic regression model analyzes the historical account data to identify the combination of financial statistics, or variables, that best predicts the probability that a particular customer will make a payment) (p.3, ¶0029).

As to claim 30, Lambiotte discloses the system according to claim 27, wherein the first and second liquidation models are CHAID models that are derived from an analysis of past data of a plurality of skip accounts and the success or failure of locating the plurality of skip accounts by the account tracing entity (i.e. the multivariate logistic regression model may, by using regression techniques well known in the art, weigh the most predictive of the identified variables more heavily than the least predictive of the identified variables) (p.3, ¶0030).

As to claim 31, Lambiotte discloses the system according to claim 28, wherein the third liquidation model is a CHAID model that is derived from an analysis of past data (i.e. the multivariate logistic regression model may, by using regression techniques well known in the art, weigh the most predictive of the identified variables more heavily than the least predictive of the identified variables) (p.3, ¶0030).

As to claim 32, Lambiotte discloses a computer readable storage medium containing instructions for causing a computer system to optimize collection of money from skip accounts, by:



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receiving data of a first skip account (i.e. platform may receive purchased account debt or customer lists from a financial institute over network) (p. 2, ¶0019);

applying the data of the first skip account to a predictive model, the predictive model being associated with an account tracing entity and operable to generate an output indicative of an expected recovery amount from the first skip account (i.e. Platform may analyze each customer's credit history information ... and may determine a potential value for each customer's account) (p.2, ¶0020); and

determining a course of action based on the output from application of the predictive model (i.e. Platform may compare the potential value and predicted cost to determine a potential profitability level, including a determination of whether and how often to contact each customer for debt collection) (p. 2, ¶0021).

As to claim 33, Lambiotte discloses the computer readable medium according to claim 32, wherein the predictive model includes a probability model that generates an output indicative of the likelihood of locating the first skip account from the account tracing entity (i.e. computing platform separately analyzes the historical account information of the accounts without demographic information using the multivariate logistic regression model to generate the back-up cost formula for calculating the likelihood of contacting the customer) (p.3, ¶44).

As to claim 34, Lambiotte discloses the computer readable medium according to claim 32, wherein the predictive model includes:

a probability model that generates an output indicative of the likelihood of locating the first skip account from the account tracing entity (i.e. computing platform separately

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analyzes the historical account information of the accounts without demographic information using the multivariate logistic regression model to generate the back-up cost formula for calculating the likelihood of contacting the customer) (p.3, ¶44);

a first liquidation model that generates an output indicative of an expected recovery amount from the first skip account if the each account tracing entity correctly locates the first skip account (i.e. The first formula weights each identified variable to minimize the error in predicting whether a customer will pay) (p. 3, ¶0030);

a second liquidation model that generates an output indicative of an expected recovery amount from the first skip account if the each account tracing entity fails to locate the first skip account (i.e. Computing platform then generates a second formula for determining an amount a customer will likely pay) (p. 4, ¶0033); and

a third liquidation model that generates an output indicative of an expected recovery amount from the first skip account if no action is taken to locate the first skip account through the account tracing entity (i.e. The multivariate logistic regression model analyzes the historical account data to identify the combination of financial statistics, or variables, that best predicts the probability that a particular customer will make a payment) (p.3, ¶0029).

### **Conclusion**

The following U.S. Patents and Patent Publications are considered pertinent prior art:

6,807,533  
6,798,413  
6,795,071  
6,456,983

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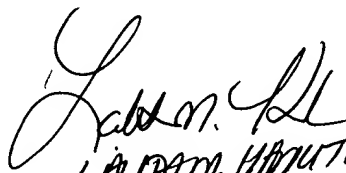
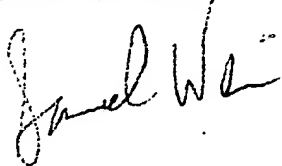
6,405,173  
6,098,052  
2003/0074308  
2002/0116245  
2001/0049658

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samuel S. Weis whose telephone number is (571) 272-2025. The examiner can normally be reached on 8:30 to 5, Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexander Kalinowski can be reached on (571) 272-6771. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Samuel S. Weis



L. M. HUTTON  
PRIMARY EXAMINER